

MECHANICALLY ACTUATED AIRTIGHT DEVICE

ABSTRACT

A mechanically actuated airtight device comprises (a mechanically actuated airtight device comprises) a cover having an upper face and a lower face, and forming with at least one hole therethrough; at least one sealing gasket being positioned above said hole of said cover, said sealing gasket having a base in a form of wedged ramp and said base further forming a through opening; at least one linked plate having an upper face and a lower face, said lower face being provided with a protuberance on one side and said upper face being provided with at least one wedged ramp at the side corresponding to said protuberance, said wedged ramp having a slope equal to that of said wedged ramp of said base, such that at least one of said wedged ramp of said upper face of at least one of said linked plate mates with said wedged ramp of said lower face of at least one of said linked plate; and a driving wheel having an upper face and a lower face, said upper face being provided with a guiding groove to allow said protuberance of said linked plate move along said guiding groove. The invention is used as a chassis for a wafer carrier. Thus, when the wafer carrier is closed, it ensures a better airtight effect, and when the wafer carrier is opened, a pressure balance between inside and outside of the wafer carrier is achieved to remove the case of the wafer carrier and to quickly break the airtight. Further, the level of the airtight can be adjusted as required.